

Claims

1. A digital certificate comprising a plurality of credential attribute properties, and a trust function
5 embedded within the certificate as an executable file, which trust function has data can determine as a function of data available to it a trust value attributable to at least a part of the digital certificate at least partly by execution of the
10 executable file.
2. A digital certificate according to claim 1, in which the trust value is of a credential attribute in the certificate.
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3. A digital certificate according to claim 1, in which the trust value is of the certificate.
4. A digital certificate according to claim 1, in which
20 the data is trust value data.
5. A digital certificate according to claim 1, in which the data includes data obtained externally of the certificate.
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6. A digital certificate according to claim 5, in which the obtained data is obtained from a user by the input of data in response to a query generated by the trust function.
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7. A digital certificate according to claim 5, in which the obtained data is obtained from a digital data store.

8. A digital certificate according to claim 7, in which the digital data store is a web site.
- 5 9. A digital certificate according to claim 1, in which the trust function varies the trust value as a function of time.
- 10 10. A digital certificate according to claim 1, in which the trust function is configured to determine the trust value automatically.
- 15 11. A digital certificate according to claim 1, in which execution of the executable file fully can determine the trust value.
12. A digital certificate according to claim 1, in which the executable file is a platform portable code.
- 20 13. A digital certificate according to claim 1, in which the certificate had a valid period and the credential function determines the credential attribute property value during the valid period.
- 25 14. A digital certificate according to claim 1, in which the plurality of credential attribute properties are from a single credential attribute.
- 30 15. A digital certificate according to claim 1, in which the plurality of credential attribute properties are from a plurality of credential attributes.

16. A digital certificate according to claim 1, in which there is at least one attribute trust value, in which the trust function uses an attribute trust value to determine the trust value.

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17. A digital certificate according to claim 1, in which there is a plurality of credential attributes and a plurality of attribute trust values, in which the trust function uses a plurality of attribute trust values to determine the trust value.

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18. A digital certificate according to claim 1, in which a credential function is provided in the certificate, which credential function is associated with at least one credential attribute property and which determines the value of the credential attribute property.

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19. A digital certificate according to claim 18, in which the trust function uses the credential attribute property value determined by the credential function.

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20. A digital certificate according to claim 19, in which the credential attribute property value determined by the credential function is a trust value.

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21. A digital certificate according to claim 18, in which the certificate has a valid period and the trust function determines the trust value during the valid period of the certificate.

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22. A digital certificate according to claim 18, in which the credential function varies the credential attribute property value as a function of time.

23. A digital certificate according to claim 18, in which the credential function is configured to determine the credential attribute property value automatically.

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24. A digital certificate according to claim 18, in which execution of the executable file fully can determine the credential attribute property value.

10 25. A digital certificate according to claim 18, in which the executable file is a platform portable code.

26. A digital certificate according to claim 18, in which the credential attribute property comprises a value operated on by the credential function to determine a credential attribute property value.

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27. A digital certificate according to claim 18, in which the credential function uses data obtained from outside the certificate to determine the credential attribute property value.

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28. A digital certificate according to claim 27, in which the obtained data is obtained from a user by the input of data in response to a query generated by the credential function.

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29. A digital certificate according to claim 27, in which the obtained data is obtained from a digital data store.

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30. A digital certificate according to claim 29, in which the digital data store is a web site.

31. A digital certificate according to claim 18, in which a plurality of the credential attribute properties have respective credential functions.

5 32. A digital certificate according to claim 31, in which each credential attribute property has a respective credential function.

33. A digital certificate comprising a plurality of
10 credential attribute properties and a trust function within the certificate, which trust function comprises an executable file, which trust function has data available to it and can determine as a function of the data available to it a trust value attributable to at
15 least a part of the digital certificate at least partly by execution of the executable file.

34. A digital certificate comprising a plurality of
20 credential attribute properties, and a trust function embedded within the certificate as an executable program, which trust function has data available to it and can determine as a function of the data available to it a trust value attributable to at least a part of the digital certificate at least partly by execution
25 of the executable program.

35. A method of communication, which method comprises the steps of communicating from a sender to a recipient a digital certificate according to any preceding claim

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36. A method of communication according to claim 35, in which the recipient inspects the certificate and the trust value is determined by the trust function

37. A method of communication according to claim 35, when
dependent on any one of claims 18 to 32, in which the
recipient inspects the certificate and the credential
5 attribute property value is determined according to
the credential function

38. A method of communication according to claim 35, in
which the communication is via a distributed
10 electronic network.